



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
|-----------------|-------------|----------------------|---------------------|------------------|

10/575,946

04/13/2006

Eugen Komarek

0169060496

7077

22428 7590 12/15/2009
FOLEY AND LARDNER LLP
SUITE 500
3000 K STREET NW
WASHINGTON, DC 20007

EXAMINER

FORD, JOHN K

ART UNIT

PAPER NUMBER

3744

MAIL DATE

DELIVERY MODE

12/15/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|---------------------------------------|--|
| Office Action Summary | Application No. 10/575,946 | Applicant(s) KOMAREK ET AL. | |
| | Examiner John K. Ford | Art Unit 3744 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 April 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>13 April 2006</u> . | 6) <input type="checkbox"/> Other: ____. |

This office action addresses the claims as they are found in the preliminary amendment submitted April 13, 2006.

The drawings are objected to because the subject matter described on page 6, lines 14-22 has not been illustrated and appears to inherently be claimed in claim 1 by virtue of the “and/or on a supplementary heater” recitation in claim 1 and clipping recitation in claim 6. Similarly, the subject matter described in the last paragraph on page 6 of the specification (and claimed in claim 10) is also not illustrated. Avoid introducing any new matter into the disclosure in attempting to satisfy either of these requirements that the claimed subject matter be illustrated. If new matter cannot be avoided – the examiner would suggest cancelling that claimed subject matter and filing a CIP application which has a proper disclosure to support that claimed subject matter.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering

Art Unit: 3744

of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Neither claim 1 nor claim 10 have any discernible preamble. While this is not required in US law, an argument can be made that the word "characterized" (typically used in European patent offices) in both claims 1 and 10 functions to separate the preamble from the body of the claim. If that is the case, the examiner maintains it is vague and indefinite as to what the overall combination being claimed actually is. Are the limitations recited in each of claims 1 and 10 required elements to infringe these claims or not. Please rewrite these claims in accordance with conventional US practice to make the overall combination claimed clear to the reader(s). The expression "interacts with components" is vague. How much and what type of "interaction" must

Art Unit: 3744

occur to trigger infringement of the claim is not quantifiable. Finally the “network of the heat exchanger” recitation in claim 10 is not meaningfully understood. What is this? Explain it using some structure that is disclosed. There don’t seem to be any “collecting tanks” disclosed either, rendering that recitation vague and indefinite.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 10 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The explanation of this is so vague in the specification making reference to “collecting tanks” that are not shown or described in any of the drawings or the specification that one of ordinary skill in the art would simply be left to guess at what was so supposed to be constructed. The examiner has no idea what disclosed structure is a “network of the heater.”

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 3744

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 5, 7, 9 and (arguably) 10 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over EP 0768197.

The EPO examiner (Marangoni, G) determined, in the International Search Report, that this reference was an “X” reference (i.e. 102(b)) on all of claims 1-10. This examiner is not sure how this conclusion was reached with respect to claims 4, 6 and 8 and to claim 10, to the extent that claim 10 can be understood (see 35 USC 112, first and second paragraph rejections, above).

In this reference dividing walls (18 and 19 in Figure 3 and 33 and 34 in Figure 7) are aligned with a dividing element (i.e. a middle tube 23 on the heater 12 as shown and described in reference to Figure 4). A vaporizer is shown at 11 and control elements are shown at 13. This middle tube 23 (the dividing element for purposes of rejection) “interacts” with the components (such as the bulged out edges of the dividing walls

Art Unit: 3744

shown in Figure 6) when applied to the dividing walls 18 and 19 shown in Figure 3 and dividing walls 33 and 34 in Figure 7. Regarding claim 10, the gap between the dividing wall and the dividing element can be 0 mm (see column 8, line 26).

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over EP '197 as applied to claim 1 above, and further in view of DE 19919132.

DE '132 teaches placing a supplemental heater 40 immediately downstream of a heater 6. To have added a supplemental electric heater 40 immediately downstream of a heater 12 of EP '132 to improve occupant comfort would have been obvious to one of ordinary skill in the art.

Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combined teachings of DE 19919132 and Waldmann (USP 4,559,994).

To have clipped the cross shaped dividing element shown in Figure 4 of DE '132 to the heater core 6 of DE '132 in the manner taught by Waldmann at Figure 6 (see clip on latch 38 holding divider element 37 to the heater 2) would have been obvious to one of ordinary skill in the art to advantageously facilitate assembly of the device as well as to advantageously facilitate rapid disassembly of the device for repair. A vaporizer is shown at 4 and control elements 26 and 29 are arranged in front of the heater. A

Art Unit: 3744

supplemental heater is shown at 40 in Figure 12. The rectangular edge of the structure shown in Figure 4 is a frame and a cross is formed by elements 24- 25 and 26-29.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combined teachings of EP 0768197 and JP 7-164863.

The explanation of EP '197 above is incorporated here by reference. To have constructed the heater core 12 of EP '197 in a manner where the network of the heater was as wide in the direction of air flow as the adjacent collection tanks would have been obvious in view of the teaching of JP '863 in Figures 1-3. Such a construction would advantageously allow for the use of an easy to construct rectangular hole in the casing for placement of the heater within the casing.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John K. Ford whose telephone number is 571-272-4911. The examiner can normally be reached on Mon.-Fri. 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl Tyler can be reached on 571-272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3744

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/John K. Ford/
Primary Examiner, Art Unit 3744